

substituting a third data stream from a third conference participant, for at least the one of the first and second data streams determined to be associated with the inactive conference participant.

33. (Amended) The method of claim 32, wherein the selected subset includes a first audio data stream formatted according to a first protocol and a second audio data stream formatted according to a second protocol.

Please add new claims 34 through 36 as follows:

34. (New) The method of claim 32, wherein the selected subset includes a first video data stream formatted according to a first protocol and a second video data stream formatted according to a second protocol.

- 35. (New) The system of claim 1, wherein the data streams in the selected subset are most recently activate data steams.
- 36. (New) The system of claim 24, wherein the first and second sets of data are audio signal data.

REMARKS

Applicants have carefully considered the final Office action dated March 9, 2001 and the references of record. In response to the final Office action and pursuant to Rule 114 (a), applicants filed a Request for Continued Examination to continue the prosecution. In keeping with Rule 114 (c), this amendment is made to present the rejected claims in better form for allowance and submit arguments intended to overcome the rejections.



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Pursuant to 713.09 MPEP, applicants requested an interview after final, and the interview was conducted on June 13, 2001 between examiner Beatriz Prieto and applicants' representatives John Conklin and Biao Zhang. During the interview, applicants' representatives and the examiner discussed claims 24, 25, 29 and 32 and their corresponding descriptions in the specification. The references applied to these claims were also discussed.

By way of background, the present invention discloses a method and system of performing real-time multimedia data exchanging, which allows data streaming and network conferencing using more than one communications protocol. In a first embodiment of the invention, a demultiplexer module monitors data streams for each of a plurality of conferencing parties for active or inactive status and incoming data streams from a new participant, and routes the data stream, based on its type, to type-specific data handlers and decoders. Upon receiving a new data stream, the demultiplexer module determines whether an existing data stream is associated with an inactive participant, if it is, the module substitutes the new data stream for the data stream associated with the inactive participant. In a large multiparty conference, the demultiplexer module monitors incoming data streams and the status of the existing data streams. It may select a subset of the incoming data streams and routes the subset for further processing.

Original claims 1, 9, 18, 21, 24, 25, 26, 29 and 32 are in independent format. In this amendment, independent claims 1, 21, 24 and 32 have been amended to overcome the prior art rejections of record and also to correct minor typographical errors. Independent claims 9 and its dependent claims 11-14 have been cancelled. Dependent claims 2 and 33 have been amended to assure consistency in language. New dependent claims 34 through 36 have been added.

In paragraphs two through six of the final Office action, all of the claims were rejected as unpatentable over prior art of record. Specifically, the final Office action rejected independent claim 1 under 35 U.S.C. § 103(a) as being unpatentable over Clapp et al. Clapp



et al. teaches a peripheral audio/video communication system that interfaces with a host computer and determines format of coded audio /video signals.

Dependent claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Clapp et al. and Bar et al. Bar et al. provides a communication management system for computer network-based telephones.

Dependent claims 3 and 4 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Clapp et al., Bar et al., Matsui et al. discloses an apparatus and method for demultiplexing multiplexed data.

The rest of the claims 5-8 that depend from claim 1, independent claims 9, 18, 22, 24, 25, 26, 29 and 32 and their respective dependent claims were all rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Clapp et al., Bar et al., Matsui et al., and Kumar et al. Kumar et al. presents a multipoint video composition and bridging system for video conferencing and other applications.

In this response, independent claim 1 has been amended to expressly recite that the sender comprises a silence suppressor for removing silences or background of the audio signals, and the receiver comprises a demultiplexer for dynamically selecting a subset of the data streams. These two claimed features are neither disclosed nor suggested by any of the cited references, including Clapp et al., Bar et al., Matsui et al. Therefore, claim 1 is patentable over the prior art of record. Claim 2 depends from claim 1 and has been amended to ensure its language is consistent with amended claim 1. Claims 3 through 8 and new claim 35 also depend from claim 1 and they are allowable for at least the same reasons that claim 1 is allowable. Of the remaining claims, each of the independent claims as amended requires either selecting a subset of incoming data streams and routing the subset for processing, monitoring the active or inactive status of the conferencing parties, or substituting a new incoming data stream for the data stream associated with an inactive participant. None of the cited references teaches or suggests these concepts, either individually or in combination.



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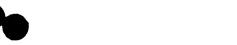
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Specifically, method claim 18 requires monitoring incoming audio or video data of a plurality of conference parties for active or **inactive** status, and **replacing** audio or video data having an inactive status with data for the new speaker. These two steps are neither disclosed nor suggested by any of the cited references, including Clapp et al., Bar et al., Matsui et al., and Kumar et al. Therefore, claim 18 is patentable over the prior art. Claims 19, 20, and 22 depend from claim 18 and they are allowable for at least the same reasons that apply to claim 18.

Independent claim 21 as amended expressly requires a demultiplexer that is adapted for dynamically selecting a portion of the RTP data streams and routing one or more of the RTP data streams of the portion based on data type. None of the cited references, either individually or in combination, teaches or suggests such a demultiplexer. Therefore, claim 21 is patentable over the prior art of record. Claim 23 depends from claim 21 and it is allowable for at least the same reasons that apply to claim 21.

Independent claim 24 as amended includes a means for determining whether one or more of the first and second sets of audio data is associated with an inactive conference participant, and a means, in responsive to the determination of the inactive conference participant, for substituting a third set of data from a third conference participant, for at least the one of the first and second sets of audio data associated with the inactive conference participant. None of the cited references, either individually or in combination teaches or suggests such two means. Thus, claim 24 is patentable over the prior art of record. New claim 36 depends from claim 24 and it is allowable for at least the same reasons that apply to claim 24.

Independent claim 25 teaches a method of operating a computerized conference system. The method expressly requires a step of determining whether one or more of the first and second audio data stream is associated with an inactive conference participant, and a step of substituting a third audio data stream for at least the one of the first and second audio data streams, the third audio data stream associated with the inactive conference participant.



None of the cited references teaches or suggests these two steps. Therefore, claim 25 is patentable over the prior art.

Independent claim 26 manages large numbers of participants, and comprises means for receiving a plurality of audio data streams from a corresponding plurality of conference participants, means for selecting a **subset** of the plurality of audio data streams, and means for rendering the selected subset of audio data streams. None of the cited references discloses the concept of subsets in the context of video/audio conferencing. Therefore, claim 26 is patentable over the prior art of record. Claims 27 and 28 depend from claim 26 and they are allowable for at least the same reasons that apply to claim 26.

As for independent claim 29, it requires the steps of selecting and rendering a subset of the plurality of audio data streams. None of the cited references teaches or suggests such two steps. Therefore, claim 29 is allowable over the prior art of record. Claims 30 and 31 depend from claim 29 and they are allowable for at least the same reasons that apply to claim 29.

Finally, independent claim 32 includes the steps of (1) selecting a **subset** of the plurality of audio data streams, (2) rendering the selected subset of audio data streams, (3) determining whether one or more of the first and second data streams is associated with an **inactive** conference participant, and (4) **substituting** a third audio data stream from a third conference participant, for at least the one of the first and second audio data streams determined to be associated with the inactive conference participant. None of the cited references teaches or suggests such concepts of subsets and inactive participants, or the step of substituting a new data stream for an inactive data stream. Therefore, claim 32 is patentable over the prior art of record. Claim 33 and new claim 34 depend from claim 32 and they are allowable for at least the same reasons that apply to claim 32.





Conclusion

In view of the foregoing amendments and remarks, the application is considered in good and proper form for allowance, and the examiner is respectfully requested to pass this application to issue. If, in the opinion of the examiner, a telephone conference would expedite the prosecution of the subject application, the examiner is invited to call the undersigned attorney.

Respectfully submitted,

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